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The JOURNAL OF EDUCATIONAL SOCIOLOGY

The Education of Gifted Children in Secondary Schools

Harvey W. Zorbaugh, *Editor*

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OCTOBER 1939

THE JOURNAL OF EDUCATIONAL SOCIOLOGY

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EDITORIAL¹

At the February meeting of the Department of Superintendence in 1925, Dr. John J. Tigert, then United States Commissioner of Education, invited representatives of various national associations interested in the problems of secondary education to consider plans for the stimulation of research in that field. The result of the conference was the formation of a National Committee on Research in Secondary Education. This Committee was composed of representatives of the associations included in the original conference and of certain other associations later invited to membership, together with a limited number of members-at-large chosen for their special interest in secondary education. The breadth of the Committee's membership may be judged from even a partial list of the associations eventually represented: the American Association of Secondary-School Principals; the National Association of High School Supervisors and Directors; the New England, North Central, Northwest,

¹ The articles included in this issue of THE JOURNAL OF EDUCATIONAL SOCIOLOGY are the proceedings of the conference concerning the educational problems of gifted children conducted by the National Committee on Coordination in Secondary Education, as part of the program of the American Association of School Administrators meeting in Cleveland in February 1939. The editorial by Dr. F. T. Spaulding, Chairman of the National Committee on Coordination of Secondary Education, explains the purpose and the setting of the conference. The last article consists of the recommendations which grew out of the conference. A paper read at the conference by Harvey Zorbaugh on the "Community's Utilization of Its Gifted Children" is not included for want of space, but will appear in an early issue of *Mental Hygiene*.

and Southern Associations of Colleges and Secondary Schools; the American Council on Education; the American Association of Junior Colleges; the American Association of Collegiate Registrars; the American Educational Research Association; the National Society for the Study of Education; the National Society of College Teachers of Education; the National Education Association; the National Catholic Welfare Conference; the Private School Association of the Central States; the Progressive Education Association; the American Vocational Association; Phi Delta Kappa; Pi Lambda Theta; the United States Office of Education.

The National Committee on Research in Secondary Education undertook from the beginning not so much to conduct independent research as to propose or encourage needed research which might be effectively carried on by other organizations. The list of projects directly undertaken by the Committee is nevertheless not unimpressive. One of the first of these was a study of the small junior high school carried out by a subcommittee under the chairmanship of Professor Emery N. Ferriss, and published as a bulletin of the Bureau of Education in 1928. The Committee's most recent independent undertaking has been a listing of needed studies in secondary education, prepared under the direction of a subcommittee headed by Professor D. H. Eikenberry, and published in 1939 by the Civic Education Service.

As a stimulating agency the Committee made its influence widely felt through its services as sponsor or adviser with respect to various undertakings. Between 1927 and 1930 it was responsible for a series of 34 articles written by Committee members and published in *School Life*. During the same period it assisted in the preparation of a number of special studies—most notably certain studies of senior-high-school promotion plans, of men teachers in the high schools, of college-entrance requirements in relation to the high-school curriculum, and of the status of the junior-high-school principal. Between 1928 and 1934 it was active in promoting, helping to plan,

and publicizing the results of the National Survey of Secondary Education. As early as 1928 it appointed a subcommittee to encourage a coöperative study of secondary education by regional associations; when the Cooperative Study of Secondary School Standards was finally launched, the National Committee on Research in Secondary Education was represented in the advisory membership.

At the time of the establishment of the Committee, research in secondary education had been sporadic and relatively limited in scope. With the development of research organizations as branches of various national associations, and with the increase in attention to problems of secondary education by various privately endowed foundations, the Committee found the emphasis in its own work gradually shifting. In 1937 it therefore appointed a subcommittee charged with recommending appropriate revisions in the constitution of the organization; and in the following year the Committee voted unanimously to adopt a new constitution proposed by this subcommittee. The changed constitution, while reaffirming the Committee's original concern for the encouragement of research, laid especial emphasis on certain new functions: the promotion of needed conferences on secondary-school problems, the encouragement of wider distribution of the results of significant investigations, and the review of undertakings by organizations in the field of secondary education in order to promote effective coöperation in enterprises of general concern. To give a more accurate indication of its purposes, the Committee itself was renamed: it is now the National Committee on Coordination in Secondary Education. Further to promote its new purposes, its executive committee, which was originally composed of its elected officers, was modified by having added to it, as ex-officio members, the Executive Secretary of the National Education Association, the United States Commissioner of Education, and the President of the American Council on Education.

Like the National Committee on Research in Secondary Educa-

tion, the National Committee on Coordination does not intend either to duplicate or to compete with the efforts of other organizations. Several organizations—notably the American Council on Education, the American Youth Commission, the American Association of Secondary-School Principals, and the Progressive Education Association—are already attempting coördination of activity in the field of secondary education. A review of current efforts at coördination makes it evident, however, that these efforts are likely to be limited in at least two important respects. First, coördination is now being attempted by organizations which in each case are promotional organizations, rather than merely reviewing or fact-finding organizations. This limitation applies to the work of all four of the organizations named: each of these organizations has made itself responsible for securing the adoption of a more or less well-defined educational program. Second, the data on which efforts at coördination are being based—the reports of deliberative committees, the results of critical appraisals of research, and the conclusions of surveys of current practice—are not ordinarily subjected to full public discussion, but are considered chiefly within the sponsoring organizations. This limitation does not apply to the work of the American Association of Secondary-School Principals; it does affect much of the activity of the other organizations. The National Committee is therefore experimenting with a plan of coördination not subject to these restrictions. Defined in positive terms, the Committee's immediate program is that of providing a forum for the open discussion and evaluation of important projects in the field of secondary education, looking toward unification of current effort and the encouragement of effort in areas which may have been neglected, but not toward the promotion of a particular educational policy.

The papers published in this issue of *THE JOURNAL OF EDUCATIONAL SOCIOLOGY* represent the first fruits of this new program. In preparation for the 1939 meeting of the Committee at Cleveland, each member of the Committee was asked to report important proj-

ects, under way or recently completed, bearing on a single problem chosen for discussion at the meeting—the education of pupils of high intelligence. The persons in charge of certain of these projects were invited to present at Cleveland brief descriptions of the purposes and methods of their undertakings, including their own evaluations of these undertakings. To appraise the projects reported and to make recommendations as to supplementary or more fruitful undertakings, the executive committee appointed an evaluating committee, composed of Dr. Warren W. Coxe of the New York State Education Department, chairman; Professor Carl G. F. Franzen of the University of Indiana; Professor Paul R. Hanna of Stanford University; Mr. Harry J. Linton, Director of Secondary Education in Schenectady, New York; and Professor Charles C. Peters of the Pennsylvania State College. The papers which follow consist of the descriptions of special projects presented at Cleveland by invited speakers, and of the evaluating committee's final report.

Interest in the Cleveland program was so strong that the National Committee authorized its executive committee to plan a similar program for the annual meeting in 1940. Discussion at the 1940 meeting is to center on preparation for occupational adjustment as a part of secondary education for all young people. Meanwhile the executive committee is proceeding to put into effect the recommendations of the Cleveland evaluating committee, which were unanimously approved by the members of the National Committee. Through continued free and open discussion of important educational issues, under the auspices of an organization sufficiently representative in its membership to be disinterested (but not uninterested) with respect to these issues, the Committee hopes to promote an increasingly well-planned and effective attack on the problems of secondary education.

F. T. SPAULDING, *Chairman*
National Committee on Coordination
in Secondary Education

EDUCATING THE ELITE IN EUROPE

WALTER M. KOTSCHNIG

Smith College and Mount Holyoke College

The term "elite" derives from *eligere*, to choose, to select; it means the elect, the privileged, those who are set apart because they are held superior.

The idea of excellence has varied with the ages. Notwithstanding the emergence of such heroes of the mind as Plato, Aristotle, or the great schoolmen, learning during the greater part of man's history took a subordinate place in the scale of commonly held values. Birth, courage, religious fervor, superior craftsmanship counted for more than scholarship. It is only since the late eighteenth and the early nineteenth centuries that learning and leadership have become growingly identified in the mind of the people. Renaissance and Reformation, Humanism and the work of the Encyclopedists had prepared the way for a recognition of the value of formal learning. The progressive industrialization of England and Germany and to a lesser degree of France and the emergence of large-scale societies with all their complexities led to a definite demand for highly educated people. It is therefore not surprising that we witness during the first half of the nineteenth century a rapid development of secondary schools as institutions for the training of a new elite. From an American point of view the development of these schools in France, England, and Germany is obviously of particular importance as they have all left their traces upon the American educational scene.

France, securely wedded to her classical traditions and inspired by a rationalist humanism, has educated her elite ever since the days of Napoleon in the *lycées* and *collèges* which emphasized *culture générale* as the supreme qualification for leadership. I. L. Kandel defines both the purpose and the methods of French secondary education when he states: "The true aims of education should be the

cultivation of a taste for study, training in the methods of work, and the development of the ability to understand, assimilate, even create. The chief means of education lies in letters, which develop neatness, precision, and logic; which elevate and enoble by intercourse with great minds and the examples of perfect masterpieces; and which transmit the heritage of ideas and traditions embodying the experience of the best endowed races." Throughout the nineteenth century the curriculum of the secondary schools, which constituted the only avenue to higher education, changed very little. Following Montaigne's dictum that a head well formed is better than a head well filled, France, the republic of the professors, insisted that her leaders should be educated in the classical tradition. This education, held conducive to mental discipline, was considered to be the best also for the building of character. Pascal's word was heeded: "*Travaillons donc à bien penser, c'est le principe de la morale.*" It is only since the turn of the century that the natural sciences have gradually found a place in the program of the secondary schools. Even today this concession is regretted by many: France continues to be "more interested in the progress of ideas, than in the idea of progress" (Sieburg).

By contrast, the English public schools, which along with some grammar schools largely supported by church or private funds, held a monopoly on the education of leaders, and emphasized the need for character training rather than intellectual achievement. Arnold of Rugby admirably described their purpose when telling his boys that "a thorough English gentleman, Christian, manly, and enlightened is a finer specimen of human nature than any other country, I believe, can furnish." To produce this specimen the classics were held in high honor and just as in France the sciences were held at bay for a long time. H. T. Tizard, Rector of the Imperial College of Science, in an address given in 1934 commented on the change in attitude and curricula which has taken place recently. "I was at a public school," he says, "at a time when to take an interest

in science was held to be a sign that you were not quite a gentleman. At my school there were 'close' scholarships to Oxford and Cambridge but I was soon given to understand that these were not available for boys on the science side. They were made available soon after I left, at about the time when baths were first installed in college—an interesting coincidence of sanity and sanitation. It does not seem very long ago to me; yet the changes that have taken place since then are so profound that it is now considered quite respectable to be a scientist, even at a public school." In addition to the formal subjects taught in secondary schools everything possible was done through disciplinary methods, the internal organization of the schools which allowed for a large measure of pupil government, through religious practices, and the life on the playing field to cultivate self-reliance and courage, fair play, and a ritual of life and manners which make the English gentleman the commanding officer and high priest of English life.

In nineteenth-century Germany several ideas of leadership contended for first place. The old idea which assigned first place to birth found a stronghold in the army and the nobility, which provided most of the officers. Special officers' training schools served their education. Under the influence of Herder and Kant another idea of leadership was encouraged by Wilhelm von Humboldt which resembled in many respects the French idea of the elite and its training. The neohumanist movement in education as represented by Wilhelm von Humboldt stressed the need for an all-round culture (*Allgemeinebildung*) which was to be based on an understanding of Roman and, above all, Greek classics. To borrow again from Kandel, the classics were to be studied "not for purposes of imitation but for spiritual assimilation, for the cultivation of taste, judgment, and understanding, for the discovery of the principles of creative activity, and for the search for the 'good, the true, and the beautiful.'" The parallel to the French *culture générale* is obvious. This ideal proved so powerful that after 1834 the *Gymnasium* which

embodied it most clearly became the only institution which gave access to the university. While the German bent for specialization and encyclopedic knowledge prevented the *Gymnasium* from ever attaining its goal, the privileged position of the *Gymnasium* as the center for the training of the elite remained unchallenged until the seventies, when the claims of science and technical knowledge became so vocal that other types of schools, *i.e.*, the *Realgymnasium* and the *Oberrealschule*, with a stronger emphasis on modern languages and the sciences were given the privilege of sending their graduates to the higher technical colleges and to certain departments of the universities. They, however, never gained the position of influence and esteem held by the *Gymnasium*. An attempt made during the Republic to create new types of secondary schools which were to promote *Allgemeinbildung* on the basis of a study of the German classics (German humanism) did not prove particularly successful.

The differences in the development of the schools for the elite in England, France, and Germany cannot becloud some marked similarities. The evolution from the classics to a grudging recognition of the need for scientific training and its educative value is a phenomenon common to the three countries. It is equally obvious in all these countries that the secondary schools, as mentioned, had a monopoly of the education of the future leaders. They were highly exclusive. Throughout the period under consideration and until the end of the World War only ten per cent of the young people of high-school age found admission to the secondary schools. Theoretically, at least in France and in Germany, admission was to be on the basis of exceptional mental ability. Practically speaking the secondary schools were the stronghold of the ruling classes—the upper ranks of the bourgeois in France, the nobility and the new industrial and commercial leaders in England, and the upper middle classes including the professions in Germany. They all required heavy fees. Wealth or at least social position was identified with ability. Pri-

vate tutoring or special preparatory schools gave even the dumbest amongst these privileged children a mental equipment which made them appear vastly superior in intellectual acumen to the ill-prepared or illiterate children of the masses. Particularly in England, to a lesser degree in France and least of all in Germany, the establishment of scholarships for a few really gifted but poor students further helped to maintain the fiction of the secondary schools as institutions of the mentally superior and to defend the whole system against the rising educational demands of the lower classes. Thus, the educated man remained a mere wish-dream of the masses.

The World War wrought substantial changes in the schools for the supposed elite. In bringing about these changes the war played an "obstetrical rather than a generative role." It simply gave some free play to the pent-up urge of the masses for a share in secondary education and the positions of eminence for which they prepared. It was recognized that democracy, for which the war was supposed to be fought, implied the right to equal opportunity in the field of education. The *Compagnons de l'Université Nouvelle* in France, a movement born in the trenches, pleaded for the *école unique*, the common school for all and a secondary education for all the intellectually gifted irrespective of wealth or social station. Their efforts were not in vain. Fees in the secondary schools were abolished after 1930, the number of scholarships for maintenance was increased, and in exceptional cases young people who had not received a regular secondary-school education were admitted to the universities. In England, the Education Act of 1918 and the Hadow Report of 1926 looked toward a raising of the school-leaving age, the establishing and strengthening of a larger number of intermediate schools, and the encouragement of publicly supported secondary schools leading to the university. While many of the more far-reaching proposals for the reorganization of secondary education have remained on paper, there has been during the last twenty years a substantial increase in secondary-school en-

rollments, particularly in the "council schools" which are supported by public funds. The democratic regime in Germany increased scholarship facilities and created the *Aufbauschule* which, building upon the elementary school, prepared for the institutions of higher learning in a five-year and therefore less costly course than the customary nine-year course in the traditional secondary schools.

It would be a mistake, however, to assume that equality of educational opportunity has been achieved in any of these countries. The studies of Grey and Moshinsky of the London schools have shown conclusively that there are still large numbers of intellectually highly gifted children who waste their abilities in poorly equipped intermediate schools which do not give access to the college or university, while there are equally large numbers of children in secondary schools whose chief qualification is money rather than brains. The same holds true for France and Germany.

The fact remains that in all these countries the curve of secondary-school enrollments rose sharply. This gave rise to a host of problems, many of which are far from solved at the present time. To list only some of them: in so far as the secondary schools in Europe are primarily college preparatory, the increase in their enrollments led to a substantial rise in college and university enrollments, which in turn threatened the professions with overcrowding and unemployment; furthermore, it was found that the new pupils admitted to the schools of the elite represented a wider range of abilities and for that reason the old curriculum needed adaptation; finally, it is held by many—and not only by die-hards—that inadequate methods of selection have resulted in the admission of poorly qualified pupils and a general lowering of educational standards. This latter group contends that the secondary schools are threatened with losing their privileged position of training institutes for the elite.

The overcrowding of secondary schools and universities was most serious in Germany. It undoubtedly contributed to the disastrous unemployment of young university graduates in Germany in

the early thirties of this century. And even where they were able to secure employment they received only scant remuneration for their services due to an oversupply of such services. In other words, higher education led no longer to financial and social success but to a great deal of misery instead. It is safe to assume that this fact contributed substantially to the reversal of the scale of commonly held values which was brought about by the national-socialist revolution. According to Nazi *Weltanschauung*, leadership is not to be achieved through an education in the classics or even the sciences as of old. The ultimate ideal is not the educated man, *i.e.*, exceptional intellect properly trained, but the soldier who combines physical perfection and endurance with strength of character, unlimited obedience to his leaders, devotion to the greater Germany and her mission, and finally an understanding of those elements of knowledge which pertain to his particular job. This change in the concept of the elite was bound to affect the secondary schools profoundly. Not only were enrollments in these schools and in the universities drastically reduced but the old-time secondary schools were either altogether abolished or they were assigned a place of secondary importance. Germany is at present engaged in building up a new type of schools for the elite which are to be under the direct supervision not of the educational authorities but of the party. The first step on this new educational ladder is the "Hitler schools" (age 12-18). From 18 to 25 the graduates of these schools may either go to the university, work in party or other organizations, or follow some other gainful employment. During the same period they have to serve six months in a labor camp and two years as a minimum in the army. At the age of 25 not more than 25 per cent of the original graduates are to be admitted to the *Ordensburgen* of which there are four and where they are to receive an additional four years of physical training and national-socialist indoctrination. At the age of 29 a small and carefully selected group of these students (*Junkers*) are to proceed to the *Hohe Schule* of National-Socialism, the su-

preme academy for the training of the future German leaders. While the curricula of all these schools are still in the experimental stage, it is already certain that the classics are to be relegated to the attic and that the major emphasis is to be on physical training, German literature and history, the natural sciences with special emphasis on courses on race, and throughout the whole curriculum an indoctrination with national-socialist principles.

It is fortunate for the future of Western civilization that no similar bankruptcy of the old ideal of man and of learning occurred in England and in France. In France educational discussion has centered in recent years on the problems of the secondary school and the best ways of preserving them as institutions for the training of the elite. Outlines of solutions are emerging which are not without interest for this country. When fees were abolished in French secondary schools the fathers of the reform, including M. Herriot, urged a stricter selection of pupils to be based altogether on ability in order to avoid a flooding of the *collèges* and *lycées*. This course was strenuously opposed by the more conservative groups in France, which resented the threat to the privileged people of wealth and position. M. Léon Bérard warned that the state school system with selection was "a variant of the assault upon the bourgeois, the expropriation of one class by another." Opposition came, however, also from those who felt that the French system of examinations and the generally applied criteria of selection gave an unfair advantage to the "book-minded" and sprang from an altogether one-sided conception of the elite. In other words, *la République des Professeurs* is gradually realizing that excellence is to be found not merely in purely intellectual achievement and that a democracy above all should recognize superior achievement in all walks of life. The idea of the "several elites" was born. The implications of this idea are tremendous and are bound to lead in the long run to far-reaching changes in the French educational system. The conviction is growing that France needs beside her old-type secondary schools,

destined for those of superior general intelligence, a series of schools for other types of the elite; *i.e.*, those who combine a good measure of general intelligence with specific aptitudes and interests. Real efforts have been made during the last few years to raise the standards of the intermediate schools (*écoles primaires supérieures*, etc.) and to develop high-class trade and technical schools. As a further measure, M. Jean Zay, the present Minister of Education, established two years ago a large number of orientation classes (*classes d'orientation*) replacing the first year of the *lycée* and *collège* (sixth school year). It is felt that careful observation of the pupils in these orientation classes will prove more helpful than the old-fashioned examinations in discovering special aptitudes and guiding the pupils in their further education. The idea of distribution over various types of schools is thus being substituted for the one-sided selection of the intellectual elite only. As these reforms are still in their experimental stage it is too early to form a final judgment. One thing, however, is certain: France is far from being prepared to rhyme democracy with "mediocracy." For this reason the possibility of replacing the *lycées* and *collèges* by a multilateral high school has never been seriously discussed. They will be maintained as separate units, as this is felt to be the only way of maintaining high standards based on a purposeful curriculum in which the classics are likely to retain an honorable though perhaps somewhat more restricted place. The curricula of the schools which are to produce the technical and vocational elite, while not neglecting education for *culture générale*, are to be equally purposefully planned to suit the particular aptitudes of their pupils.

Leaving aside the differences in educational ideals and methods due to differences in national attitude, educational developments in England are in many respects similar to those in France. The Spens Report (*Report of the Consultative Committee on Secondary Education with Special Reference to Grammar Schools and Technical High Schools*, London 1938), one of the most outstanding educa-

tional documents in recent years, does not encourage the multi-lateral high school but emphasizes the need for separate types of schools—modern (senior) schools, technical high schools, grammar schools—with different educational objectives. The grammar schools are to remain the main avenue to higher education open to all those of a superior “innate, all-round intellectual ability.” However, the transition from the intermediate modern schools and the technical high schools to the grammar schools is to be facilitated. While refraining from using such an un-English expression as “elite,” the report implicitly maintains the idea of the “several elites” by stressing the need of parity in status of the three types of schools: “If schools providing secondary education of different types are to be made equally acceptable to parents and opportunities for entering the type of school which can best develop their particular abilities are to be made equally available to the children, the establishment of parity between all types of secondary schools is a fundamental requirement.” A common code of regulations for the three types of secondary schools, similar scales of teachers’ salaries, equally good school buildings, etc., are among the measures intended to bring about such parity. Whether they will prove sufficient is another question.

To conclude. Any easy generalization of our findings or their application to the American educational scene is full of dangers for the simple reason that the term elite is relative. It is contingent upon the scale of values held by any particular society and can only be clearly understood in the light of an implied or clearly expressed *Weltanschauung*. Various European countries, as has been shown, are at present struggling to arrive at a new definition of what constitutes the elite, and in so far as they are successful their secondary schools are likely to become more purposeful again and more effective in educating the elite. The United States is in the midst of a similar struggle. The most advanced spirits in this country are losing faith in an oversimplified positivist philosophy which consid-

ered all knowledge of equal value and had little appreciation of differences in native ability and individual excellence. As during all periods of transition a good deal of confusion reigns. The schools are left to flounder. Educational psychology may develop the most perfect means of testing, but, as long as we do not know what ought to be tested in order to select the future leaders, tests and measurements remain tools which cannot be fully put to work. Similarly, the efforts to improve curricula are likely to remain sterile as long as there is no clear conception of the ends which education, particularly education of the elite, is serving.

From an American point of view the most important idea which has come out of Europe is that of the "several elites." This country has done more than any other to develop methods by which to ascertain differences in aptitudes and individual excellence; prompted by a mistaken egalitarianism it has done less than other countries to recognize the social and educational implications of these differences. Signs are not lacking that the acceptance of the idea of the "several elites" is likely to lead at least in the larger communities to the establishment of separate types of secondary schools, each with definite objectives and with curricula sufficiently well defined to assure the attainment of these objectives. The same end might be achieved by the creation of separate educational ladders within the multilateral high school. A beginning along these lines has been made in many places. However, more needs to be done to clarify the objectives to be reached by each of the separate educational ladders, to plan the curricula accordingly, and above all to bring about real parity between college preparatory and other courses. This can only be achieved if there is a fundamental change of attitude to those schools and courses which are not primarily college preparatory. It is not their function to receive the discards, the misfits, and the dumb, but it is their task to foster excellence in those fields which are not the province of the college candidate. The best in teachers, curricula, and teaching material is only good enough for

them. Here lie tasks worthy of our best efforts for several generations to come.

Democracy at the present time is threatened not so much by the onslaught of the new totalitarian gospels but by its own mediocrity. It will survive only if there is a new recognition of the importance of excellence in many fields. This is the great chance of the schools. If they fail, the education of the elites will be taken over by corporals and party bosses.

EDUCATIONAL SUGGESTIONS FROM FOLLOW-UP STUDIES OF INTELLECTUALLY GIFTED CHILDREN

LEWIS M. Terman

Stanford University

I have no experimental data to report on the educational techniques best suited to the education of gifted children at the high-school level. My researches, as you know, have had to do with determination of the mental and physical traits of gifted children and with the case-by-case follow-up of such subjects from childhood into adult life. Any light I can throw on the specific topic of this conference will be indirect rather than direct. My task has been to help lay a foundation of factual data on which a new pedagogy of the gifted could be erected. The fashioning of the educational structure itself is a task for teachers and practical educational experts, aided by psychologists no less practical.

But the foundational work is a *sine qua non* of genuine educational reform in this field. First of all it was necessary to have measures of intelligence that would place a subject with reasonable accuracy in the scale of human abilities. These we now have. In the second place it was necessary to clear away a mass of erroneous traditional opinion regarding the physical and psychological characteristics of the intellectually gifted. This too, in some measure, has been accomplished. In the fourteen years that have elapsed since the publication of my findings on the *Mental and Physical Traits of a Thousand Gifted Children*, few if any of the major conclusions there drawn have been seriously challenged. Although the information at my command was regrettably incomplete and in numerous details probably in need of correction, I believe that in its major features my composite picture will stand. I am encouraged in this belief by the fact that other investigators, of whom Dr. Leta Stetter Hollingworth is an outstanding example, have been led by their in-

dependent researches to conclusions which fit my data almost as perfectly as they fit their own.

We now know that gifted children *typically* are not physical weaklings, not lopsided freaks, not social defectives, not unstable psychoneurotics, and not headed for postadolescent stupidity. On the contrary, we know that as a group they are physically better equipped than the generality, that they are not injured by any reasonable amount of intellectual stimulation, that they tend to versatility rather than to undue specialization of ability, that they are above the average in character traits and social effectiveness, and (something highly important) that in the vast majority of cases their intellectual superiority is permanent. Furthermore, we know that intellectually gifted are to be found in every racial group and social class though in certain stocks more numerous than in others, that often they are not recognized by the teacher, that they are usually located in a school grade two or three years below their achievement level, that they can easily master the ordinary elementary curriculum in two or three hours a day for five or six years, that so far as intellectual abilities are concerned they can be made ripe for college work by the age of fifteen, and that some of them have acquired more knowledge before entering college than many seniors have at the time of graduation. We are beginning to learn that the superior achievement of gifted children under the usual system of mass education cannot be credited in any great degree to the school, for it is only slightly correlated with number of years of school attendance.

Such is the gifted child in terms of central tendencies. The composite picture can be drawn in no other way. Actually, of course, in any considerable group of such children one finds a rich variety of mental and personality patterns. No two, unless identical twins, are alike. Each presents his peculiar problems. Nevertheless, the establishment of these central tendencies was highly necessary, for

the lines they follow naturally determine our educational attitudes toward gifted children as a class. Until the facts just indicated became known, one person's opinion on how children of this type should be educated was about as good as another's.

The composite picture I have sketched is based upon my 1922 data for elementary- and high-school subjects. To what extent has the picture changed with the passing of the years? Two follow-up studies have been made. The first, which was rather thoroughgoing and involved many retests, was made six years after the original study. The second, less thorough, has been in progress during the last two years. A more searching investigation of the present status of the subjects, made possible by a generous grant from the Carnegie Corporation, is about to begin but the results will probably not be available before 1941.

Contact has been maintained with 93 per cent of the original group. The thousand elementary-school subjects of 1922 are now in their 20's and have a median age of 25. The 1922 high-school subjects range from 27 to 35, with a median of 31. The mortality rate and insanity rate are below those of the generality. Intelligence tests six years after the original study showed very few cases of marked drop in I.Q., and a three-hour intelligence test of about 400 of the subjects 10 to 12 years after the original study yielded similar results. It is a fact of great importance that the student who will be intellectually superior at the college level can be identified almost as accurately at 8 as at 18. Unfortunately, the use that will later be made of the superior gifts cannot be so accurately foretold.

Mean age of completing the eighth grade was 13 years; of graduation from high school a little less than 17 years. The earlier they enter college the better work they do there, at least down to 15 years, though entrance much before 16 is likely to complicate the problem of social adjustment. No advantage, so far as scholastic success in college is concerned, accrues from a year of postgraduate work in high school or from remaining out of school a year after high-school

graduation. In high school half the marks of boys and two thirds of the marks of girls were A. Scores on objective achievement tests were correspondingly high. Despite the depression, 90 per cent of the boys and 85 per cent of the girls went to college. Of boys entering, 19 out of 20 were graduated; of girls, 9 out of 10. Two thirds of the boys and half of the girls who completed college took graduate work. Of 250 boys who had completed their graduate work up to a year ago, 30 received a Ph.D. degree, 33 a medical degree, 65 a law degree, and 17 a degree in engineering or architecture.

One of the most deplorable facts brought out by our follow-up study is the general inadequacy of scholarship aids for the gifted student. About 40 per cent of the boys and 20 per cent of the girls were compelled to earn half or more of their undergraduate expenses. Undergraduate earnings of the boys totaled more than a half-million dollars. Despite many awards of assistantships and fellowships, totaling around \$200,000, the situation in the graduate years was little better.

About half of the boys entered one of the professions, a fourth are in semiprofessional or business pursuits, and the remaining fourth are scattered in a great variety of occupations. There are jazz-band players, Walt Disney artists, ghost writers, radio announcers, motion-picture technicians, motion-picture script writers, salesmen, sales managers, clerks, seamen, a rare stamp dealer, a policeman, and a fox farmer. Although the depression hit them hard, all have managed to keep off relief. About 40 of the boys are teaching in colleges and universities, several of whom have distinguished themselves. It was a little surprising to find that 4 per cent of the boys had entered upon a religious career.

Half of both sexes are married and half the marriages have produced a total of more than 350 children. Most of the spouses rate high in education and intelligence, especially those chosen by the girls.

A comparison is now in progress between the 150 most successful

and the 150 least successful of the boys, these being roughly the upper and lower quartiles. By success is here meant the extent to which (as judged by three ratings) a subject has made use of his superior intellectual ability. The groups were closely matched for age. These A and C groups, as we call them, have been compared on some 200 items of information supplied by the 1922 and 1928 test scores, health records, case histories, trait ratings, etc. By thus reading the records backward we expect to be able to derive a rough scale for predicting the success a gifted child is likely to attain.

The contrast between the groups is indicated by the following facts: three quarters of the A group have had postgraduate work as compared with a fifth of the C group; nearly half of the A group but less than 6 per cent of the C group graduated with honors; half of the A group but only a tenth of the C group have been awarded scholarships, fellowships, or assistantships; average salary of the A group by age 30 is about \$3,600 a year, that of the C group only half as much; nearly three fourths of the A group but only a sixth of the C group are in the professions.

It will be recalled that all of both groups had childhood I.Q.'s of 140 or above, which, so far as intelligence is concerned, is high enough to permit decidedly superior scholastic or occupational success. What factors appear to be responsible for the greater success of the A group? Several such factors have been found. One thing that emerges clearly is the importance of motivational and adjustment difficulties, sometimes traceable to personality faults but more often to an unsuitable educational regime. The gifted child held year after year in classes two or three grades below his ability and achievement level quite naturally loses a few of his enthusiasms. A majority make the best of a bad situation and come through fairly well. A considerable minority grow rebellious or lose ambition.

The slump of the C group is noticeable in the elementary grades, becomes quite marked in the high school, and assumes alarming

proportions in college. Compared to the A group the C's enter high school three months later, receive less than half as many A marks, and engage in far fewer extracurricular activities. At all levels the two groups differ less in achievement as measured by objective tests than they differ in school marks. Below high school the 1922 Stanford Achievement Test quotients of the A's were only a few points above those earned by the C's. At the high-school senior level in 1928 only 3 per cent of the A's and 17 per cent of the C's were below the 95th percentile on the Iowa High School Content Examination. In college about 10 per cent of the C's disqualified themselves by low marks, though I am convinced that some who did so would have rated higher on the Learned and Wood achievement tests than the average Stanford graduate. Although many of the C's by the time they reach college show a general deterioration of ambition and interests, others in this group are still riding hard their private intellectual hobbies and are unwilling to adopt those of their instructors. One suspects that later some of these will have to be transferred to the A group.

In this connection I wish to point out that gifted students in general are to a surprising extent self-educated. Learned and Wood find many college seniors untutored in English beyond the high school who know more English than other college seniors who have majored in the subject. They even find *high-school* seniors who know more science than some *college* seniors who have majored in science preparatory to teaching it in high school. Such facts as these show what the gifted high-school student is sometimes up against.

Returning to the comparison of my A and C groups, we find that the contrast in scholastic success cannot to any great extent be accounted for by intellectual differences. The A group contains a slightly larger proportion of 1922 I.Q.'s above 160, but the medians differ by only a few points. The same was true at the high-school and college level, though in college the difference was slightly

greater than earlier. The C's are still gifted, but their talents are either unemployed or else are employed in ways that do not contribute to scholastic success.

Although our case studies point to the conclusion that many of the C group are suffering chiefly from the effects of educational malpractice, it would be unjust to give the impression that this is the sole factor. There is evidence suggesting the presence of a tangled skein of both environmental and hereditary influences upon the personality. Twice as many A fathers are college graduates and five times as many are in professional occupations. Fifty per cent more C subjects than A's had no formal instruction in the home. Twice as many C's as A's have parents who are divorced or separated, and, of the subjects themselves who have married, nearly three times as many C's as A's are separated or divorced. The A's tend to marry younger and twice as many of them marry college graduates. Reliably more A's than C's express a definite occupational preference. Of the A group, 14 per cent are of Jewish descent; of the C group, only 5 per cent. The case-history data both for 1922 and 1928 indicate a definitely greater incidence in the C group of nervous symptoms, social maladjustment, and mentally abnormal relatives. The 1922 ratings of the subjects by teachers on 25 intellectual, volitional, emotional, moral, and social traits were consistently a little higher for the A group. On the M-F test given in 1928 the A group rated reliably more masculine. In line with this, introvertive tendencies are more marked in the C group.

These personality differences, although they have little or no effect on the I.Q.'s, seem to be important determiners of success both in school and in life. To what extent the personality differences themselves are the outcome of environmental conditioning in home and school, and to what extent they are of genetic origin, it is at present impossible to say. Although genetic factors cannot be ruled out, one cannot read the case histories of my C subjects without being greatly

impressed by the evidence indicating that mass educational methods have played an unhappy part.

It will be generally agreed that the aim of the school should be to make the most of every grade of ability. That ideal is perhaps nowhere fully realized, but it is certainly more nearly approximated with children of average or inferior potentialities than with the gifted. My researches sometimes leave me with a feeling of despair at the wastage of superior talent. Although the school can accomplish very little in the way of manufacturing high I.Q.'s, there are limitless possibilities in the direction of making those provided by nature more fruitful of achievement. That, in my opinion, is the foremost educational problem of these troubled times.

PROBLEMS OF RELATIONSHIP BETWEEN ELEMENTARY AND SECONDARY SCHOOLS IN THE CASE OF HIGHLY INTELLIGENT PUPILS¹

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I. GENERAL CONSIDERATIONS

I shall not dwell here upon the present knowledge of gifted children as organisms. To do so would be merely to repeat what Professor Terman has just said in his excellent paper. Our findings in follow-up studies on tested children, in New York City, confirm in all particulars his researches on the Pacific coast. Since these several studies have been carried on in complete independence, one in the East, the other in the West, for nearly twenty years, we may certainly feel justified in the conclusion that we are arriving at truth about the mental and physical traits and development of highly intelligent persons, coming as we do to the same results.

My remarks here will deal, rather, with certain problems of the *education* of the highly intelligent, which confront us at present, in the course of our five-year experiment at Public School 500, Manhattan (Speyer School). I may say at the outset that my direct contacts with the education of gifted pupils have all been on the level of the elementary school. I consider that the problems are most urgent on this level, because it is in the primary and elementary school that the very intelligent child most especially needs a supplement to the standard curriculum. The program of progress through the elementary grades is based on what pupils at, or only very slightly above, the average can master, at given ages; so that the extremely intelligent child has little or nothing to do there. His interest is not engaged, and his power is not challenged. The situation of such

¹ An address before the National Committee on Coordination in Secondary Education at a symposium on "The Education of Pupils of High Intelligence," Cleveland, February 27, 1939.

children has been well exemplified in a recent biography,³ which sets forth the sense of futility from which many of them suffer at school in the early years.

When the child reaches senior high school, however, the case is somewhat different. The college preparatory course of the secondary school was originated with and for pupils of college caliber. It is therefore based on what very intelligent adolescents, and they only, can learn. Hence it offers to the pupil at and above 130 I.Q. (S-B) tasks of sufficient interest and difficulty to engage his powers of learning.

Laying aside, for purposes of the moment, argument as to whether the content of the college preparatory course is what it should be from all angles, we maintain that it is sufficiently abstract, complex, and difficult to operate as an intellectual stimulus for quite highly intelligent adolescents.

I shall return to this point later, raising it here merely to explain why it has seemed to me especially important to work in the elementary school. One cannot work for long in the elementary school, however, without becoming involved in research which has to do with the secondary school. There are many problems of coördination that require for their adequate study the joint efforts of both elementary and secondary school. We are currently trying to find answers to these problems at Public School 500, Manhattan, for we shall begin sending pupils from there to the senior high schools in June 1939.

II. THE ELEMENTARY SCHOOL

To continue for a moment in consideration of the elementary school, for some years, beginning about 1918, experimentation has been sporadically undertaken in New York City on the initiative of individual principals to find out what should be done for highly intelligent children. It was not, however, until January 1936 that the

³ Amy S. Bridgman, *My Valuable Time. The Story of Paul Bridgman Boyd* (Brattleboro, Vermont: Stephen Daye Press, 1938), 109 pages.

Board of Education itself took official action in cognizance of the presence of these pupils in the school system. On January 28, 1936, Public School 500, Manhattan (Speyer School),^{*} was founded by formal action of the Board of Education and Teachers College, jointly, for the study of intellectual deviates, other than the feeble-minded, in the elementary school.

Two classes for rapid learners were included in the setup of this school, to accommodate twenty-five pupils each. These classes have now been in progress for three years. Their chief purpose has been to find experimentally and to establish a curriculum that would provide a genuine education for children of mental calibers above 130 I.Q. (S-B); an education that would extend their minds and interest them in the interests of society during the years of the elementary school.

Pupils were selected for this experiment on the basis of three criteria: (1) they must test at or above 130 I.Q. (S-B); (2) they must be at least 7 years 0 month old, and at most 9 years 6 months old; (3) they must be representative as a group of the various ethnic stocks composing the population of New York City. This constitutes what we consider a perfectly democratic selection. Nothing "counts" toward selection except the tested quality of the pupil himself.

The organization is that of an 8B elementary school, designed to run for five years as an experiment. Promotion to the ninth grade of the senior high schools at the age of 13 years was planned for our pupils. The school also includes seven classes for slow learners (I.Q. 75-90), the pupils of which mingle freely with those of the rapid learner classes, except for purposes of classroom instruction.

The teachers were selected from a long list of applicants for the posts among licensed elementary-school teachers of New York City. Criteria for selection rested on personality, degree of education, and desire to undertake experimental work.

^{*}Leta S. Hollingworth, "The Founding of Public School 500: Speyer School," *Teachers College Record*, Vol. 37 (November 1936), pp. 119-128.

Enrichment of the curriculum has been going forward for three years. Pupils at and above 130 I.Q. (S-B) need, on the average, about one half of their time in the elementary school for mastering the standard curriculum set up for "all the children." "Mastering" here means not "passing" with a mark of 65 per cent, but genuine *mastery* with marks of 90 per cent and above.

In the half day thus left to spare, an enrichment curriculum has been pursued, which has elsewhere⁴ been described in some detail. The chief features of this enrichment curriculum are a series of units, one each term in each class, on "The Evolution of Common Things" and the French language and literature.

III. TRANSITION FROM ELEMENTARY TO SECONDARY SCHOOL

The time comes when pupils thus selected and educated are to pass to the ninth grade of the senior high school. At this point questions arise which call urgently for discussion as a joint responsibility of both elementary and secondary schools. Some of these questions are as follows:

1. Why is 13 years to be chosen as the optimum age for the transition?
2. Why is junior high school omitted from the picture?
3. What ceremony, if any, should mark the transition to senior high school?
4. What items of cumulative record should accompany the pupil as he or she enters high school?
5. What differences are there in the demands of high school, as compared with the elementary school, which would affect the minimum I.Q. at which enrichment is needed in the high school? Is enrichment needed in the high school at 130 I.Q. (S-B)?
6. The point at which enrichment begins to be needed having been determined experimentally, how should the secondary school

⁴Leta S. Hollingworth, "An Enrichment Curriculum for Rapid Learners at Public School 500: Speyer School," *Teachers College Record*, Vol. 39 (January 1938), pp. 296-306.

organize to provide a genuine education for pupils at and above that level?

7. Assuming an enrichment program for pupils above 150 I.Q. (S-B) desirable or imperatively necessary in high schools, what matters shall be agreed upon to enter into the curriculum?

8. Shall we guide all of our highly intelligent elementary-school pupils into the college preparatory courses? Or shall some of them be so guided that they will end high school without the "credits" for college?

9. What can and should public schools do for those few pupils who test at or above 170 I.Q. (S-B), for whom no experimental work so far done is of much real effect, either in elementary or secondary school?

IV. CONSIDERATION OF THE QUESTIONS ARISING

Not all of the questions proposed above can achieve full discussion here. However, we shall attempt to say something about them. What we say will be an outgrowth of our own professional observations, extending over the past seventeen years. Particularly, it will result from the current obligation at Public School 500, Manhattan (Speyer School), to promote to senior high school our first group of children now reaching the thirteenth birthday.

It is obvious that we have to determine upon *an age* for promotion to the senior high school. This must take into consideration "the whole child." We cannot isolate the intellect for this purpose. "Body, mind, and soul" must pass as a unit to secondary school.

The brightest of our pupils were fully ready for the scholastic work of the ninth grade when they were 8 years old; several others, when they were 10 years old. Ability to "pass examinations" set for 8B pupils cannot, therefore, reasonably become our criterion for promoting these children, unless we wish to assume responsibility for placing prepubescent 8-, 9- and 10-year-old children in a scho-

lastic milieu that is determined by the physical size and social maturity of adolescents.

After much discussion, we fixed upon 13 years as the age for transition to senior high school. We came to this largely as a result of our pooled professional experience, but not wholly on that basis. We gave considerable weight to the follow-up study⁸ of pupils identified in 1922, and kept together for three years in special classes at Public School 165, Manhattan. There were 56 of these children whom we promoted to the ninth grade at an average age of 11 years; and the high-school careers of all of them were followed through sixteen different high schools.⁹ In the course of this follow-up, the question was repeatedly asked, "What would be the best age to enter the ninth grade?"

Sixty per cent of these pupils gave 13 years as the "best age" to enter high school, and twenty-six per cent gave 14 years or older. Only one child gave an age younger than 12 years as optimum for entering high school. This group, as a whole, would have preferred to enter the ninth grade at an age older than that at which they entered, and gave cogent reasons for the preference during their high-school careers.

These ideas persisted through the college careers, especially among the boys, many of whom felt they were misplaced in college at 15 years of age. Entering high school near the thirteenth birthday, a child saves time, and yet is not made subject to the tensions which may result from trying to meet social and physical requirements for which he is too immature.

Junior high school is omitted from the picture as ours was a five-year plan. Such a plan of curriculum enrichment as ours fits best

⁸ E. E. Lamson, *A Study of Young Gifted Children in Senior High School*. Contributions to Education No. 424 (New York: Bureau of Publications, Teachers College, Columbia University, 1930), 117 pages.

⁹ E. E. Lamson, "High-School Achievement of Fifty-Six Gifted Children," *Journal of Genetic Psychology*, Vol. 47 (1935), pp. 233-238.

into the 8B setup, for such a program cannot be supervised if the pupils are scattered and the situation made subject to the transition from 6B to junior high school. In the metropolitan situation, it is not feasible to take the pupils for special classes till they are at least 7 years old. The infrequency of their occurrence makes it necessary to assemble them from several districts, and they are not mature enough to come from a distance when they are 6 years of age. Parents cannot assume the burden of accompanying them twice a day. Our pupils were 8 years old, on the median, when they entered our rapid learner classes.

We have found it feasible to organize classes for 8-year-olds, give them a five-year program of special studies, and have them fully ready for senior high school at 13 years of age. This plan has worked out well, whereas, if we had had to consider a transition to the junior high school in the midst of our work, difficulties would have arisen, and it is not clear how our program could have been carried out at all. However, a field for *experimentation* lies here for those who would be predisposed to favor the junior-high-school plan of school organization.

We decided that no ceremony of graduation should mark the promotion to senior high school. Our pupils will make the transition not in a body, but a few at a time at the end of each term. Some informal social event may take place, but no ceremony of graduation as such.

The question, "What items of cumulative record should accompany each child from the elementary school?" is one requiring much study. Here we are working quite experimentally. The public schools of Altoona, Elkins Park, and Fort Wayne, Pennsylvania, are reported to have formulated a cumulative record card for rapid learners, which we hope later to consult. The records of mental tests, the record of scholastic-achievement tests, and a statement of teachers' ratings on a variety of character traits should no doubt be

included with the health record and attendance record in the elementary school.

Ideally, the secondary school should receive these pupils already tested mentally, with cumulative records; but, since in the existing state of affairs this is not possible, because such tests have not been generally made, the high schools are wondering what methods to use in selecting the highly intelligent as they arrive, in the ordinary course of events, for admission.

We must agree that we have, in fact, no method at present generally available of distributing the top percentile of the adolescent population. The Army Alpha, which strictly speaking pertains to adults, is no doubt the most nearly appropriate instrument we have for distributing the top one per cent of adolescents. No other group test has sufficient "top" for this purpose, and no individual test has a "ceiling" high enough to prevent the best from "going through." Two forms of Army Alpha combined will give as good an approximation as is at present available to a correct distribution of adolescents at and above 130 I.Q. (S-B).

There exist tests of scholastic aptitude which pertain to adolescents of college caliber, but these are not generally available, being limited to the organizations which make specific use of them.

From observations of the progress of highly intelligent children tested at an early age, I offer the hypothesis that pupils of 130 to 150 I.Q. (S-B) have quite enough to do in the truly efficient pursuit of the college preparatory curriculum of the senior high schools, and do not need any enrichment of this curriculum as far as challenge to ability is concerned. What these pupils need is merely freedom from the presence of great masses of classmates who are mentally unadapted to the college preparatory course, and the opportunity to work unhampered, in segregated groups, such as are now being formed in many secondary schools under the concept of *the honor school*.

Pupils above 150 I.Q. (S-B) are, however, probably in definite need of an enrichment of even the college preparatory course as it exists currently in senior high schools. If experimental observation should prove this hypothesis to be true, how should the secondary school set about it to provide for the genuine education of such pupils? Should the huge high schools of a great city, like New York, organize an enrichment curriculum within the honor schools for these extreme deviates? Should honor schools have faculties proper to them only? Assuming an enrichment program for pupils above 150 I.Q. (S-B) to be found desirable or necessary in secondary school, what matters shall find place in such a curriculum?

The answers to these questions cannot be stated from the swivel chair or the arm chair. Years of realistic hard and intelligent work will have to be done, by way of experiment with various groups of adolescents. As regards the question pertaining to enrichment of curriculum, I dare offer the suggestion that there are "common things" the evolution of which would be more properly worked out at the adolescent level than at the level of childhood by highly intelligent pupils. Thus at Public School 500, Manhattan (Speyer School), we often find ourselves wishing that we might have our pupils at adolescence in order to take up with them the evolution of common but rather abstract things, such as the evolution of law and order, of trade and money, of warfare, of punishment, and many other things concerning which no systematic instruction is ever given outside of professional schools.

One may suggest that in the elementary school the enrichment curriculum might proceed by covering the evolution of "common things" which are concrete, as we have been doing, leaving for the secondary school those "common things" which are relatively abstract and involve especially concepts of social-economic consequence.

It is to be considered, also, that each of these pupils, at and above 150 I.Q. (S-B), would have the capacity to master a manual trade,

in addition to mastering a profession, if time were allowed during adolescence. At 13 years of age, the hand then being developed, such pupils might be trained for skilled trades, in their spare time, as an enrichment of curriculum. In a changing world, it is perhaps a good thing for those who are capable of *both* profession and skilled manual craft to have *both* at their service as adults, and to be capable of serving society and themselves in more than one specialized vocation, as was and is actually the case with many able Americans, reared and educated under pioneering conditions of the nineteenth century and earlier.

To this point we have been speaking of enrichments accompanying and supplementing the college preparatory course for pupils testing above 150 I.Q. (S-B). But shall we guide *all* of our highly intelligent pupils into college preparatory courses? Or shall some of them be positively guided so that they will end high school without the "credits" for college? Shall all whose circumstances tend to force them into vocational high schools be allowed to drift in that direction? Here is a question of fundamental importance for society, which at this moment we hardly know enough to raise, much less to answer. Only one in every hundred born tests at or above 130 I.Q. (S-B). What does society most *need* from this little handful of persons? These can perform socially desired functions which none of the other ninety and nine can possibly perform. They can be educated in ways which are forever out of the reach of all who test below them. What should we, as educators, the publicly appointed guardians of their intellectual lives, do with these children for their own and society's best interests?

There is no more serious question than this in all education: How shall a democracy educate the most educable? At present these children are to a great extent lost in the vast enterprises of mass education, and are left to handle their special problems as they may, by themselves, while the energies of teachers are bent upon the main business of dealing with the ninety-nine per cent who test below

130 I.Q. (S-B). Common sense would tell us that a child who tests as far above the average as a feeble-minded child tests below cannot escape having special problems under conditions of mass education. We cannot go into this matter in detail here. These problems have been set forth in another place.⁷ It is for us to consider them carefully, for educators are the sole group appointed by society to guard the interests of these children. We are their official guardians (in addition to their natural guardians, parents, who are often helpless either to recognize their abilities or to develop them).

V. WHAT ABOUT GENIUS?

We come finally to what may be the most important point of all—the point where we inquire into the responsibility of the public schools for children who are as far above those of 130 I.Q. (S-B) as the latter are above 100 I.Q. (S-B). I refer to those very rarely occurring pupils who test at or above 170 I.Q. (S-B). These children are important for civilization in inverse ratio to their infrequency of occurrence. They are the ones who cannot only *conserve* thought in its abstract reaches, but can *originate* new thoughts, new inventions, new patterns, and can solve problems.

When, about twenty years ago, Terman⁸ began to attempt classifications of high deviates, on the basis of I.Q., he called 140 I.Q. (S-B) “genius or near genius.” The intervening years have proved that this idea must be revised. Seniors in many of our first-rate colleges test at a median of 140 I.Q. (S-B), or even higher, and about a quarter of *all* college graduates test at or above this level.

That point in the distribution of I.Q. where mental products suggestive of genius, as defined by lexicographers, begin to appear, seems to be as far above 140 I.Q. as 140 I.Q. is above average. Some-

⁷ Leta S. Hollingworth, “The Child of Very Superior Intelligence as a Special Problem in Social Adjustment,” *Proceedings of the First International Congress on Mental Hygiene* (New York: The International Committee for Mental Hygiene, Inc., 1932), Vol. II, pp. 47–69.

⁸ Lewis M. Terman, *The Measurement of Intelligence* (Boston: Houghton Mifflin Company, 1916), 362 pages. Also, Lewis M. Terman, *Genetic Studies of Genius* (California: Stanford University Press, 1925), Vol. I, 648 + 15 pages.

where between 170 and 180 I.Q. (S-B), we begin to see emerging, in early adulthood, that "highly unusual power of invention or origination," that "original creative power, frequently working through the imagination," which is ordinarily called "genius."⁹

This element in our juvenile population, so significant and so far to seek, passes unrecognized at present through the public schools. We have not even commenced to evolve an education suitable for a child who at 9 or 10 years of age is able to think on a college level. The idea that such children exist at all is even laughed to scorn by teachers and principals who have a quarter of a century of "experience" behind them. These children have no way of making themselves known. The *mental tests* make them known. They become known only to those educators who "believe in" mental tests.

The most interesting problem in education is to discover how these children, testing above 170 I.Q. (S-B), can and should be educated; to devise ways and means whereby these far deviates may get the full use of their abilities in school and society, especially when they have no money. The concept of democracy on which the United States was founded is one of equality of opportunity. The intention of our educational policy is that every child should have a chance to develop as his natural abilities may entitle him to do, all artificial distinctions being eliminated. Now at last psychological science has provided an effective instrument for achieving this democracy in education, namely the mental test, by means of which a child may be recognized for his own ability, regardless of age, sex, race, creed, or economic condition.

How shall we as educators utilize this instrument of genuine democracy? How shall we proceed under conditions in which the founding fathers are now mistaken by many citizens to have proclaimed and promised biological equality!¹⁰

⁹ Webster's New International Dictionary, 1935.

¹⁰ Nicholas Murray Butler, "Is Thomas Jefferson the Forgotten Man?" Address delivered at the Parrish Art Museum, Southampton, September 1, 1935. Published at 405 West 117th Street, New York City.

Perhaps we should take another leaf from the book of the French Republic, where the delusion of biological equality has always been successfully avoided; where the State continually reviews its attempt to secure equality of opportunity by explicit efforts to find and foster the natural elite, and to know where the gifted occur in the French population.¹¹

We may also consider the Belgian policies, with regard to subsidy of the gifted,¹² "Ce principe fondamental: Que chaque enfant, quelle que soit la situation de fortune des parents, soit mis en état d'acquérir par l'instruction tout le développement intellectuel et professionnel dont il est capable."

All of the questions here raised call for definite answers *at the present time*. Such questions could not be effectively raised prior to the twentieth century, because psychologists had not previously advanced to a point of supplying a scientific method of determining intelligence in childhood. It is the most significant contribution of psychology to education, in this century (and, perhaps, in all centuries), that we are enabled to know the mental caliber of a human being in his early years.

More and more it becomes clear that human welfare, on the whole, is much more a matter of the activities of *deviates* than it is a matter of what the middle mass of persons does. Those educators who make a joke of the genius and regard the dullard as a mere figment of the imagination of psychologists, or who solve the educational problems which these children present by the simple device of "not believing in" them, fiddle while Rome burns. It is the deviate who takes the initiative and plays the primary part in social determination. How shall we educate him in a democracy?

¹¹ C. Bouglé, *Enquêtes sur le Baccalauréat* (Paris: Librairie Hachette, 1935), 120 pages.

¹² Léon Bauwens, *Fonds des mieux doués* (Bruxelles: Librairie Albert Dewit, 1927), Cinquième édition, 77 pages.

EDUCATION FOR GIFTED PUPILS IN THE SECONDARY SCHOOLS OF LOS ANGELES

ARTHUR GOULD

Deputy Superintendent

In common with most school systems that attempt to meet the needs of groups of children with special characteristics, Los Angeles undoubtedly does much more for children whose problems are caused by lack of mental ability or social maladjustment or undesirable home and community backgrounds than it does for children who have outstanding ability. The reason for this is probably to be found in the fact that the mentally and socially maladjusted children constitute problems from the point of view of the teacher and the administrator, while, in general, the very capable children do not force themselves into undesirable prominence. Only a relatively small percentage of those children who can be considered extra-bright are found to be maladjusted to school situations. A study of 5,764 boys who were considered problem cases in the City of Los Angeles was made for the period 1925-1938. One hundred and five of these, or 1.8 per cent, showed I.Q.'s between 120 and 139. All this amounts to saying that, while some gifted children give evidence of retardation in school grades and while others show a certain amount of social and emotional instability, most of them, following a normal behavior pattern, receive little attention. If the leaders of the country ought to be found among those who are especially gifted, then the schools are doing very little indeed to train them for leadership responsibility.

For more than a dozen years Dr. Leta S. Hollingworth has assailed the fallacy of holding the brilliant child down to a system geared for the average child. She says we are destroying a natural resource that cannot be replaced. She devoted herself to pioneering for a sane, considerate education of brilliant children. The public-school system is a leveler which is more effective in leveling down

than in leveling up. The gifted children are especially the victims of this leveling process. Extremely intelligent young children are not interested in the games of children their own age and often prefer to read, work puzzles, or play by themselves.

A recent utterance of Franklin K. Lane is a challenge to the public schools: "Progress means the discovery of the capable. They are our natural masters. They lead because they have the right and everything done to keep them from rising is a blow to what we call our civilization."

The preceding must not be taken to mean that Los Angeles has not attempted to meet its responsibilities in connection with gifted children. In Thomas Starr King Junior High School the children of superior intelligence are partially segregated by the use of an "Expectancy Quotient in Reading." For the highest group, consisting of children of extremely high intelligence, various activities are provided. There are two groups in creative writing of all types. There are also creative art opportunities in the various art classes, and a special assignment on a school publication. The publication this year is taking the form of an account of visiting expeditions made by the school during the year. The editorial board is a group of superior children. A third very significant activity is a group in guidance, conducted by the principal, and consisting of twenty-five students of superior intelligence. The class is conducted as an informal discussion of subjects such as the following:

What is fear and why are we afraid?

Why are we shy?

Why are we liked or disliked?

What are assets and liabilities for personal development?

How have people compensated for deficiencies?

Why are some boys and girls sex conscious?

How can we overcome heredity deficiencies?

What is heredity?

Why are some women masculine and some men feminine in appearance?

What makes some people giants and others dwarfs?
What is propaganda?
What is scientific method?
How can we know when advice is sound?
Can we be guided in the choice of our life work by
astrologists or fortune tellers?

The following two poems, written by a fourteen-year-old boy in the creative writing class at this school, are examples of the type of creative effort made by the students in this class. The first poem is addressed to beauty, the second poem is part of a Christmas song written for his Christmas card—a wood block of a New England church from a sketch made by the boy last summer.

Thou Art All Around

I see thee in the mountain grand,
Towering high above the land;
In the crashing, thundering sea
Where the mighty winds blow free.
Where the sea birds sweep and cry,
Spiraling ever higher in the sky;
I see thee in a flower, jeweled with dew,
Flaunting saffron petals in the blue;
I see thee in the maiden's tear
When the even-tide draws near.
In a pausing, fleeting sound
Oh Beauty, thou art all around.

Awake, Ye Hosts

The day has dawned—Arise!
Ye carolers in praise—
Oh sing, ye hosts, in one accord!
Make known that rank is nought.
And titles high forgot—
Fling wide the castle doors!
And sing, ye all, in joyful voice,
 " 'Tis here!
 Rejoice!"

The Susan M. Dorsey High School—one of our newest high schools—is experimenting with a free study program for students with exceptional mental ability. I shall quote from a report upon this work by the principal of that school, Mr. G. Millage Montgomery:

This study was the result of a feeling on our part that, in connection with so many of our guidance programs, so much attention was directed to maladjusted students, particularly those maladjustments resulting from low mentality, that by the time the school was in a position to give special attention to pupils of exceptional mental abilities, all of the available teacher time had been utilized.

We were also prompted by a desire to know more about these mentally superior children to see if they possessed any potential qualities of leadership which could be developed in the interests of their own future success and, selfishly, from the standpoint of developing a stronger type of leadership in our own school. So often these very capable individuals possess a modest streak which keeps them from stepping forward into positions of responsibility where they could really render valuable service. It was hoped that from this experiment their future possibilities for success could be increased. We have had the feeling that there is a definite need for a higher type of leadership in the school and in the world in general.

Furthermore, we were interested in knowing what these pupils do, as well as in checking on ourselves to see whether we were supplying them with a challenging program. It was felt that such a group should be rather small in order that it should not become unwieldy. We had in our possession the results of either Otis or Terman tests.

The first step was to survey these test results. This survey showed that there were approximately 80 children out of 1,248 enrolled in the school who were in the area above 125 I.Q. For no particular scientific reasons, but merely for convenience, we decided to set the basis of 125 I.Q. and work from there. The group consisted of 36 girls and 48 boys.

One fifth of one teacher's classroom time was freed in order that she might work with the counselor for a semester to study these particular children. This study involved the giving of several tests such as the Iowa or Progressive Reading Test, the Bell Adjustment Inventory Test, the Wrenn Study-Habits Inventory, the Sims Score Card for Socio-Economic Status. In addition, under the heading of individual interest, two ques-

tionnaires were evolved, one to be filled out by the pupil, the other for the teacher of these pupils to use. Teacher marks in both subject achievement and personal traits were likewise surveyed.

As a result of individual conferences with the children and the information from the tests, a group of 32 was chosen from the original group of 84. This selection was based chiefly on the final marks of the teacher in subjects and traits, for this furnished one index of their ability to achieve.

These 32 children were invited into a conference and the program of future responsibility and leadership in the school was placed before them by the principal. There was no attempt to create in their minds a feeling that they were superbright children. The approach was made primarily from the angle that they had, by virtue of the results of their schoolwork and the reactions of the teachers involved, proved themselves capable of assuming responsibility, and that, as a result of this, we wished to increase their opportunity to enjoy certain valuable experiences such as were available in classes which they could not attend under their present programs.

It was emphasized that we realized that they were all busy, but they were told that the busy man was the person upon whom added responsibility was always placed in life situations. Solutions for their problem of finding extra time were then suggested. The responsibility of evaluating their own ability was placed upon their shoulders. The suggestion was offered by various teachers that possibly they could receive permission from certain of their teachers to attend classes less than five times per week in order to give them free time for general school service of a type that would develop their individual personalities, or so that they might arrange with teachers of other classes which they would like to visit or enter as auditors or participants in the normal activities of those classes.

Before anything could be done in this connection, it became necessary for them to analyze the value of such a program and to take up the matter with their respective parents. The feeling on the part of those in charge of the program was that it would be the student's responsibility to make these contacts with the home. If the home approved, the child would then go to his individual recitation teachers, after first analyzing his own capacities and abilities, and obtain the permission necessary to be absent for visitation purposes. It was understood also that the student could not attend any other class during that particular free time without having first received the approval of the teacher of that class.

It will be noted that in every relationship in this program a rather heavy

responsibility was placed upon the individual pupil. It is obvious that, under the circumstances, some new type of report upon the work of the children will have to be developed. This is one of the problems for the future. It will involve a report from each teacher upon the work of the program in general, as well as upon the work of each individual child.

It is expected that these children will, among other things, formulate a master calendar of outstanding lectures, demonstrations, concerts, and other valuable events available in the school which they will want to attend at their own discretion.

Follow-up conferences with this group are contemplated at which individuals within the group will have an exchange of experiences as a result of their visits.

The Louis Pasteur Junior High School has been open only a year and a half. Some pioneering work by the faculty of that school is reported by the principal, Miss Sarah Bundy, in the following terms:

With a high percentage of pupils of superior intelligence in this school certain specific ways have been sought to make provision for their needs. One of the most fundamental ways of such provision about which teachers are concerned is individual guidance of these children. The fact that the school setup of social-living classes provides that the same teacher carry a group of pupils through several semesters makes possible a pretty thorough knowledge of their capacity (in the case of both those of high or low intelligence). Guidance responsibility is definitely accepted by these teachers. Not only they but teachers of special subjects as well plan their work very definitely with the capacity of the child in mind.

It is believed that a homogeneous grouping based upon ability also helps in meeting the needs of the superior pupil. This grouping established with entering B7's becomes modified in the later semesters when choice of electives causes some shifts from group to group. In other words, the A8-A9 classes are much less homogeneous than A7-B8, yet even in these last three semesters ability grouping is approximated.

Believing that I could best show the way in which this experiment is operating, I secured information directly from the teachers as to their procedures, and, believing also that such reports would stimulate their own thinking, I asked for brief statements from as many as cared to make

them. The result has been distinctly reassuring. In general they agree that the center of interest of the exceptionally bright child must be discovered and motivation provided through that interest center to enrich his experience. Many mention the importance of improving the quality of his cultural experience, stimulating his creative ability, developing his problem-solving capacity, improving work habits (often more careless among this group than those of average ability), guiding his out-of-school activities, and, above all, directing his leadership toward social ends.

I should like to quote excerpts from the teachers' statements to indicate their viewpoint and some of the means they employ. One social-living teacher writes:

"Bright pupils not only work more quickly but they work *differently*, and that difference in attack should be recognized and developed.

"For my brighter group I use more thought-provoking problems with more abstract concepts. Creative writing of poetry and prose is constantly encouraged. An enriched reading program is stressed. An ascending scale of accomplishment is expected. Flexible activities are suggested to permit individualized attack. Differentiated assignments are made. Opportunity is provided for discussion and activities to formulate codes of conduct. Opportunity is also given to learn patience in awaiting one's turn to speak, and for tolerance of the ideas of others.

"Specifically, some of the activities carried on principally by the higher group students include:

1. A room newspaper which is printed once every two weeks and whose editing and production are in the hands of the superior students, with the rest of the class in charge of various departments.

2. Committee chairmanships of

- a) Conversation groups

- c) Panels

- b) Discussion groups

- d) Debates

3. Dramatizations. Brighter pupils adapt stories for dramatization by the class. These are presented as plays, as radio programs, or with puppets.

4. Specific vocabulary building drill to supply vocabulary adequate to superior thinking.

5. Assignments to stimulate the creative imagination, wherein the pupil may project himself into the past or future. For instance, in our unit on England:

- a) 'A Crusader's Diary'

- b) England's story as it might have been if England had remained part of the European mainland ('Might Have Been' history)
- 6. Preparation of matching, multiple-choice, and other objective tests for class use.
- 7. The compiling of files of room materials (magazines, books) on unit.
- 8. Classification of the fiction books in the library.
- 9. Preparation of approved short stories for the rest of the class which consists of:
 - a) Short introduction to arouse reader's interest
 - b) At conclusion of story, a few suggestive questions which the reader answers
- 10. Room responsibilities—various committees.
- 11. Special reports and research activities."

Another teacher in charge of a class with a median I.Q. of 124, now in the B8 semester, which has had few shifts since B7, explains the initial necessity of incorporating plans for improvement of skills: spelling, penmanship, use of dictionary, correct forms, oral expression, etc. She also states:

"Along with the formal instruction has gone a chance for individual experiencing. Panels, forum discussions, debates, dramatizations, original presentations of problems have all made allowance for the difference between 110-157 I.Q. Extra work credit has given the brighter, more energetic pupil a feeling of satisfaction for time spent on related topics.

"Various methods have been used to present the material. At present the class is enthusiastic about forum discussions. A forum is presented every week, the topics having been chosen by the class the week before, usually after much discussion.

"The children now are evaluating their own work: Is this better than what I did before? I'll make this my best work.

"Goals have been set by pupils individually, goals which may change from day to day, or week to week, or may take months to change."

Another teacher using creative writing as her particular medium for developing the superior pupils takes advantage of special occasions like Mother's Day, when verses written in class may be slipped under mother's breakfast plate that morning. Publication of worthy prose or poetry in the school paper also serves as an incentive for such work.

In addition to these typical references from teachers of social living, a few other extracts may be of interest. A teacher of Spanish states:

"Opportunity for enriching the work for superior pupils is afforded by special emphasis on the cultural background of Spanish in a study of Spain, Mexico, and the other Americas. Original skits written in Spanish furnish an outlet for those who enjoy writing as well as producing plays."

In a large metropolitan secondary school it is often very difficult to make special plans for a limited group of pupils. It is for this reason that special provisions, such as those indicated in the preceding paragraphs, are not likely to become general practice. If, then, special opportunity is to be created for those competent children who are likely to furnish leadership in the school and in the community after school days, that provision has to be supplied by modifications that are possible within the usual administrative framework. The most hopeful answer along this line is probably to be found in a flexibility of curriculum, together with a large degree of flexibility in administering that curriculum. Flexibility in curriculum planning will be found by planning units of work large enough so that, within the area of the unit, children of all ranges of ability will find challenges suited to their particular abilities and interests. This means that the units of experience will have to be built on a large framework and will have to occupy enough time so that children will have time to orient themselves within the unit, each one locating the activities in which he will participate with reference to such participation as will give him the greatest challenge which he can accept. If the unit upon which the class and teacher decide has to do with the culture of a certain people, the brighter children will find interest and challenge in studying the music or the literature of the people involved. On the other hand, possibly the least able will deal with the geography of the country or the mechanical and technical developments.

In such a situation a tremendous responsibility rests upon the teacher. She must see to it that the situations are made challenging enough for the brightest and interesting enough for the slowest. Before all else, in such a class she must know the individualities of the children exceedingly well.

EDUCATING THE SUPERIOR STUDENT IN THE HIGH SCHOOLS OF NEW YORK CITY¹

HYMEN ALPERN

Principal, Evander Childs High School

The education of pupils of superior intelligence has entered its first phase in the City of New York, and, perhaps, in other cities of the United States, through the development of so-called "honor schools" and of stratified curricula arranged on an ability basis. The honor schools are of various types as I shall describe presently. But regardless of minor differences they all attempt to segregate pupils of superior ability into subject classes so that the course of study can be covered more thoroughly and, in many cases, so that the course of study can be amplified by dignified work that will stimulate mental growth in consonance with their greater mental ability. In most cases the honor school is an aggregate of the superior classes that have resulted from the process of stratification, but the very fact of naming this aggregate of classes an honor school and of assigning a director to supervise it tends to make the aggregate take on definite character. There is no doubt that there will emerge from these honor schools varied organizations which will tend to improve the development of those pupils who cannot profit sufficiently through pursuit of the ordinary work provided in our high schools.

It would seem that the honor-school movement is so young that to determine the nature of its final development would be impossible at this time. Let me give you a brief description of the honor schools within schools, special separate schools, and other special provisions made for the education of the superior students in the high schools of New York City:

1. *Honor Classes.* Special classes for pupils of superior attainment in particular subjects are found in every one of our fifty-five high

¹ A paper read at the annual meeting of the American Association of School Administrators at Cleveland on February 27, 1939.

schools, including even the smallest. In just one of our high schools there are offered as many as fifty "special" classes and forty-two "honors" classes for the superior and those interested and gifted in a particular field of work. A pupil who shows particular aptitude in one subject is placed in a special course or in an honor class in that subject, and follows an enriched course in the direction of his inclination while attending regular classes in other subjects. Special courses for the bright and the specially gifted pupil are offered by capable teachers in almost every department. The English and speech departments allow the superior student to express himself fully in courses in journalism, literature, creative writing, public speaking, and choral speech. Enriched courses in the sciences, mathematics, foreign languages, history, economics, secretarial studies, and health education invite the talented pupil to display his potential abilities and challenge him to such an extent that he is stimulated to greater activity. The work done by the pupils in the painting, graphic arts, interior decorating, and costume designing courses augurs well for their artistic futures. For those interested and gifted in music, that department offers courses in composition, harmony, and choral work, in addition to group and individual instrumental instruction.

2. *Separate Specialized Schools.* New York City has a number of special high schools whose function is to provide unified curricula for students whose special interests and capacities merit the opportunity for advanced specialized training. We have a high school of music and arts, a high school of science, two technical high schools, a textile high school, several commercial high schools, and twenty-five vocational high schools.

3. *Schools Within Schools, Commonly Known as Honor Schools.* In accordance with orders issued by Associate Superintendent Fred-eric Ernst all of the fifty-five cosmopolitan or academic high schools of New York City will have honor schools functioning by September of this year. During the past few years two types of honor schools have developed in New York. One type of honor school is based

on the multifactor theory of intelligence espoused by Thorndike, which, as you know, recognizes a number of intelligences rather than one intelligence. The other type of honor school functioning in New York City is based on the unifactor theory of intelligence, advocated by Ebbinghouse and others, that intelligence is general, that it is a simple function. According to this theory an individual who is bright in one subject should be bright in all others. Typical of the first type is the Evander Childs High School honor school. The Evander School is a planned, coördinated, and unified organization, operating under a faculty carefully chosen from among the best teachers in each department. Their efforts to devise and conduct appropriate activities are coördinated by a director who endeavors to pool their experiences with the various classes. Pupils are selected for special instruction on the basis of achievement in the particular subject. The honor school is accordingly composed of the successful students from the third term through the eighth term. All boys and girls who have made, first, a rating of 85 per cent or more in any subject for the two preceding terms, and, second, a general average of 75 per cent in all prepared subjects for the preceding term are qualified for admission. A student may be in the honor school in some subjects and outside of the honor school in other subjects. Typical of the second group of honor schools is the Morris High School honor school. Here students are in the honor school in all subjects if their general average is superior. Thus we may find in the Morris Honor School a student who is linguistically inferior attending enriched courses in languages with students of superior linguistic talents.

SUGGESTED SCHOOL FOR THE MOST GIFTED

OR

THE SUPER-HONOR HIGH SCHOOL

From a firsthand familiarity with the honor schools operating for the benefit of superior students in the high schools of New York

City, I must admit that the geniuses and the near-geniuses of our pupils are not dealt with separately, and probably not suitably. These pupils are mixed with the other pupils in the honor school, although there is sufficient evidence to prove that they are separated from them mentally by a greater gap than exists between the honor pupils and the average pupils. In Public School 500, Professor Hollingworth has isolated a group on the elementary-school level, which should serve as a model for high-school organization. Here a group of the most gifted pupils are segregated for special instruction. Such an arrangement in the secondary schools would be, in my opinion, very desirable, and it is the purpose of this concluding section of my paper to recommend the establishment of a separate "super-honor high school" for the most gifted pupils in the City of New York. What I am recommending for New York may be applicable to other municipalities. In order that this may be accomplished a number of obstacles would have to be removed. To begin with, the number of pupils available for this school, even if the whole City were combed to find them, would not be very large. They might come from any of the widely scattered areas of Greater New York, but in order that this school could function they would have to live near enough to the building to enable them to travel to it without undue hardship. In such cases, transportation could be arranged for them in precisely the same way as it is for crippled or blind children in New York City. In other cases, it might be necessary for the parents to move near the vicinity of the school in order to solve the problem of transportation.

FINANCIAL SUBSIDY

In many cases, financial subsidy would be necessary in order that pupils of super-superior ability in underprivileged homes might be able to attend the school. I should like to recommend that the basic principle of scholarships applied to pupils graduating from high school and intending to go to college be applied also to the most

superior pupils graduating from elementary school to enable them to go to a super-honor high school. I should like to recommend that, in cases of pupils of superior ability, they be given financial assistance in accordance with their needs up to a maximum sum to be determined upon through future study but surely sufficient to enable them to attend this school in reasonable comfort. It seems to me that conservation of these most superior pupils constitutes the greatest asset that we have. The contribution of funds to ensure their proper development is an expenditure in which we can be certain to secure many times the profit that ordinarily accrues from educational investment.

I should like to recommend further that, at least for the present, such a super-honor school be established within the confines of one already functioning high school in the entire city. There is considerable advantage in having these very superior pupils associate with fellow pupils of their own age and social-achievement level. This can be done in such subjects as health education, music, art, the extracurricular, and other classes where work is socialized or individualized. Such an organization of a super-honor school would contribute to the proper adjustment of the pupils in the normal social life of our democratic society. Accordingly, room should be made in an existing high school so that suitable classes for these pupils could be organized. It will cost somewhat more to operate a super-honor school than the ordinary high school. Classes, of necessity, would be much smaller and more space would have to be provided for work outside of classroom instruction. The cost, however, would probably be less than that resulting from the construction and operation of many of our specialized schools, such as the science high schools, music and arts high school, and the vocational and trade high schools. Perhaps this lesser expense, which I am recommending that we assume, is a more justifiable one than the greater one which the City is already expending, and properly expending, for existing specialized high schools.

CURRICULUM CONSIDERATIONS

It is incumbent upon any one recommending the creation of a super-honor school to state in terms, however vague, what would be the nature of the instructions that should be undertaken there. At this stage of my study, I am preparing to recommend only the broad outline of what I think should constitute the course of study at the outset of such a project. What changes would result from actual experience with such a school, it would be rash to predict. In order that the pupils of a super-honor school could articulate satisfactorily with the various colleges in which they would enter, they should cover the conventional program of work, in addition to an amplified and possibly fused program of work superimposed upon the prescribed courses of study. This recommendation is made for the very practical reason, among others, that nearly all of our colleges are geared to the conventional secondary-school course of study, and that a marked deviation from this might defeat the recommendation contained herein. Experience with superior pupils of this type in the elementary schools, as stated by Professor Hollingworth, has indicated that those pupils who are in, or nearly in, the genius class are able to cover and absorb the conventional program of work with great speed and facility. There is no reason, at least at the outset, why they should not, therefore, cover the same ground as other pupils. There will be, however, sufficient time for them to cover large projects on a fused basis such as have been undertaken with success by many of our best progressive schools. Such projects cut across the subject-matter lines and put to use the knowledge and skills achieved in the regular school program of studies. These projects and activities present teaching situations on a functional plane which are in themselves pedagogical procedures worthy of the foundation of a special school. But in the super-honor school the purpose is to enable the pupils to develop their interests and capacities to the highest possible degree through dignified mental work with the sort of activities which will engage their attention

when they join the adult life of the community and pursue their own endeavors as scholars and leaders. There are projects which deal with social and economic life, others that deal with science, and many that deal with experiences of the most varied types that can be given to these pupils so that, in addition to the normal high-school work, exploration of their talents can be made to an extent hitherto not undertaken on the high-school level.

Moreover, it would be seen that no attempt for these pupils to finish high-school work at an early age is contemplated. On the contrary, an effort will be made to retain them for the full four-year period, but during that entire time to maintain their level of work on such a plane and at such a pressure as to ensure intriguing mental activity and growth for pupils of supercapacity. A detailed statement of the curriculum does not belong in this paper. It is enough to recommend the establishment of such a super-honor school and to state a few of its more pressing problems.

THE TEACHING STAFF

The selection of the personnel of a teaching staff for a super-honor school would necessitate combing our system for our most skillful and best informed teachers. Whether or not a special grade of teacher or a bonus to be paid to them would be necessary for effective organization is a matter requiring further study. As a preliminary opinion, it would seem to me desirable to offer some financial emoluments as an inducement to securing applications from our superior teachers.

CONCLUSION

The survey of the honor high schools of New York City and the situation that obtains throughout the nation is extremely encouraging. All over America, educators are alive to the necessity of educating superior pupils, and in numerous localities are doing something about it. We can expect from this activity the development

of great educational institutions devoted to the training of our great leaders, our great philosophers, our great artists, and our great scientists. We can expect from this movement a greater America. I am recommending one more step beyond that which has already been taken: the creation of a super-honor high school to develop our geniuses and our near-geniuses through every force and resource at our command. This last recommendation, together with Professor Hollingworth's advocacy of a super-elementary school and Professor Terman's recommendation of a super-university, if carried out, I believe, will be a crowning monument to democratic education in the freest democracy on earth.

REPORT OF THE EVALUATING COMMITTEE ON THE EDUCATION OF GIFTED CHILDREN IN SECONDARY SCHOOLS

NATIONAL COMMITTEE ON COORDINATION IN SECONDARY EDUCATION
MEETING AT CLEVELAND, OHIO, FEBRUARY 27, 1939

The committee is using the term *gifted* to apply not only to children of high general ability but also to children of high ability in any special field.

"Education of gifted children in secondary schools" relates essentially to the educational program which should be provided. However, this educational program must be based upon a thorough understanding of the nature of gifted children and upon the place these children as adults should take in society. Our report, therefore, is broken down into four parts:

- I. The nature of gifted children
- II. The place gifted children should assume in society
- III. The educational program for gifted children
- IV. Suggestions to the National Committee on Coordination in Secondary Education

I. The nature of gifted children

A. *What research has been done*

1. Experimental studies in the United States, with few exceptions, have assumed that giftedness is a normal variant in the distribution of abilities and not a pathological or abnormal condition. Four hypotheses have been advanced to explain giftedness:
 - a) It is a pathological condition closely related to mental disease.
 - b) It is simply a normal variant.
 - c) It is a product of a special or abnormal environment.
 - d) It is the result of an interaction of both environment and heredity.

The studies thus far made in the secondary-school field have been based almost entirely on the second of these hypotheses, whereas studies in early childhood and childhood have been based in many instances on the third and fourth assumptions.

2. Most of the studies of giftedness have been determined by intelligence tests which probably indicate only one type of giftedness. Recent work by the factor-analysis technique seems to indicate that different abilities may be less closely related than they were formerly thought to be.
3. There have been a few studies, notably Terman's and Hollingworth's, that have followed children through a period of years. These studies, however, have been mainly within the academic success areas.
4. In so far as they have given attention to other than academic factors, these studies have tended to indicate that children who are superior intellectually tend to be at least normal socially and physically.

B. What needs to be done

1. Before a satisfactory educational program for gifted children can be derived it is necessary that there shall be analytical research into the nature of giftedness. This research should be directed not only to the general nature of giftedness but to the sources of variations in giftedness among individuals. We believe that such research as is being carried on in child-development institutes should be extended to young people of the secondary and college levels.
2. We believe the techniques now being used should be supplemented by studies of outstandingly gifted individuals. Case-study techniques which have been developed in the fields of sociology, medicine, and biology can be profitably applied to this problem.
3. We recommend greater attention than has thus far been given to the beginnings of (a) literary and artistic creativeness, (b) in-

ventiveness in scientific and mechanical fields, and (c) unusual ability to determine and direct public opinion and public action. It is further recommended that there be analytical studies of the interrelationships of different types of ability in gifted individuals.

II. The place the gifted child should assume in society

A. *What research has been done*

1. The evaluation committee has been able to discover practically no research as to the place the gifted individual occupies or should occupy in American democracy, although both educational and popular literature are full of vague generalities as to the need of fostering talent in a democracy. Present discussion of the problem offers little tangible evidence as to the place that the gifted individual should occupy in American society or as to the means by which education may make it possible for him to occupy that place.

B. *What needs to be done*

The place which the gifted individual should occupy in society can only be determined by thorough and disinterested analysis of the obligations which society should or does impose on persons of unusual talents and the opportunities it offers such persons to make constructive use of their talents. From this standpoint the committee believes the following types of analysis to be essential in the order in which they are listed:

1. An appraisal of the parts which it is desirable that persons of exceptional talent in any field should take in American society. This analysis cannot be based solely on research; it must be essentially a rational determination of values similar to that which was undertaken in the National Education Association report on socioeconomic goals in America.
2. An inventory of the actual opportunities now open to young people of exceptional talent in American business, industry, science, artistic endeavor, political life, and scholarship.

3. An investigation of the civic and social attitudes and informations of gifted children in relation to their social and economic environment.
4. A study of what actually happens to gifted young people in their attempt to find a constructive place in American society after leaving school. This analysis should be so conducted as to give evidence not only of the extent to which individuals of superior ability have taken constructive places in society but also of the factors which have been responsible for their frustration when they have become antisocial. The factors to be considered in this connection should include not merely opportunities (or the lack of opportunities) for the use of outstanding abilities, but also the characteristics of the individual himself—knowledge apart from his special abilities, understanding of people, personality integration, and the like.

III. Educational programs for gifted children

A. *What has been done*

In contrast to the paucity of research activities carried on both in respect to the nature of gifted children and their place in society, there are a great many projects, mainly of a promotional character, dealing with the instructional program and its administration. Although a great deal of work has been done on the educational program, the projects have frequently been ill-conceived and have been of such short life that it has been impossible to evaluate their worth; in fact many of them have been devised to meet a temporary need.

In planning many of the individual programs, little use has been made even of the meager data available concerning gifted children; and each school system which has planned a program seems to have started afresh as though no other system had worked in that field. In many instances the educational programs have been limited to an attempt to raise school marks—an altogether too limited objective. Nevertheless, the committee recog-

nizes the fact that such pioneering efforts provide helpful suggestions for a program for the education of gifted children and, for that reason, should be continued.

Research findings in regard to the characteristics of gifted children have not been interpreted in terms of school practice. For example, studies have shown that gifted children generally have unusual drive, initiative, and broad interest, but these findings have not been translated into appropriate school practice.

The studies that have come to the attention of the Committee may be summarized as follows:

1. There are in the literature a considerable number of descriptions of isolated programs dealing with gifted children. These are not experimental in the scientific sense and have not been evaluated.
2. There are a few meager experimental comparisons of the effectiveness of alternative techniques dealing with gifted children. These are limited in their scope and significance.
3. Many constructive proposals are in operation or are being suggested which as yet lack evaluation.
4. Ten universities in the country offer special work for the teacher of gifted children. In eight of these the work consists of single courses. In two a group of courses or a curriculum exists.

B. *What needs to be done*

A satisfactory program for gifted children must be predicated on and evaluated in terms of the nature of giftedness and the place of the gifted in society.

The committee recommends the following projects:

1. Compilation and critical evaluation of present programs, published and unpublished, for the education of gifted children, which will contribute suggestions to the building of more appropriate programs of education for the gifted.
2. Setting up of a series of quantitatively controlled experimental comparisons of the effectiveness of various techniques for deal-

ing with gifted children (concerned not merely with pupils of high general intellectual ability, but also with pupils gifted in any special area), such as (1) the pupil's part in planning courses of study, (2) differentiated assignments in heterogeneous classes, (3) special classes for the gifted, (4) special schools for the gifted, (5) acceleration as compared with enrichment, and (6) partial release from routine requirements.

3. If investigations under II-B-1 and II-B-3 show that gifted persons generally lack certain qualities needed for making an optimum social contribution, programs and teaching techniques which seem plausibly related to achieving those characteristics should be formulated, tried out empirically, and evaluated in terms of their later actual results.
4. The organization of demonstration classes and schools, which follow as closely as possible findings already available, to develop curriculum materials, methods of teaching pupil relationships, and school organization, and to aid in the training of teachers.
5. As widely as possible public and private secondary schools should be encouraged to initiate programs for gifted children and to make these programs public as wisely as possible for the information and guidance of others interested in the field.

IV. Suggestions to the National Committee on Coordination in Secondary Education

Up to the present point the committee has considered the problems of education of the gifted with respect to what has been done and what needs to be done. Members of the committee, however, feel that the report will fail of its purpose if no recommendations are made as to possible ways of securing action. For this reason the committee is making the following suggestions for carrying on the necessary research that needs to be done:

- A. That the executive committee be directed to have this report reproduced and widely circulated.
- B. That the executive committee be directed to send copies of this

report to the chief officers of every national and regional secondary-school association, and to the appropriate officer of each association concerned directly or indirectly with the education of gifted children, requesting critical comment.

- C. That the executive committee be directed to urge upon the officers of the National Education Association the establishing of a deliberative committee, similar to the Committee on Socio-Economic Goals of America, to consider and report on the place of gifted individuals in American society.
- D. That the executive committee be directed to urge upon the United States Office of Education, or the National Education Association, or the American Council on Education, or all three of these organizations, that they request from competent research individuals or groups outlines of research projects suggested in this report under II-B-2,3,4.
- E. That the executive committee be directed to find some means of summarizing in nontechnical language the findings of the proposed research on the education of gifted children and that these summaries be disseminated as widely as possible so as to encourage the incorporation of research findings in actual school practice.

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BOOK REVIEWS

Nazi Germany: Its Women and Family Life, by CLIFFORD KIRKPATRICK. Indianapolis: The Bobbs-Merrill Company, 1938, 353 pages.

The author spent a year in Nazi Germany. He frankly admits the difficulties he encountered in procuring his data; the eagerness of National Socialists to describe the glorious triumphs of Nazism, the reluctance of those who opposed the present regime; the impossibility of being totally impersonal and objective, and, in the writing of the material, the necessity of avoiding references so direct as to make possible the determination of their origin.

Despite these admitted difficulties, the author has written a forceful and comprehensive description of the influence of National Socialism upon women and the family. He summarizes the claims made by the Nazis but finds that the facts do not square with these assertions. He concludes that "the Germans have become a nation of sleepwalkers who commit acts of hatred with words of love, who talk of peace and move toward war. With a sincere, albeit tribal, idealism, the sleepwalkers are marching blindly behind their hypnotic leader." German women are trained to the dual code of love for the in-group and hatred for the out-group.

Rural America Reads, by MARION HUMBLE. New York: American Association Press, 1938, 101 pages, \$1.00.

Rural America Reads is a study of the reading interests of the rural population of the United States, and the way in which these interests are served. Miss Humble, herself a librarian with sociological training, visited libraries serving rural needs throughout the United States. Her story is an interesting portrayal of the social forces of American life which are bringing the rural population out of its social isolation.

Bookmobiles, pack mules, radio book reviews, discussion groups, and Uncle Sam's R.F.D. are only a few of the agencies employed to help the rural man keep abreast of the times. The book will well repay the sociologist for the few hours required to read it.

At the Bar of Public Opinion: A Brief for Public Relations, by JOHN PRICE JONES AND DAVID M. CHURCH. New York, Inter-River Press, 1939, 181 pages, \$2.00.

Public-relations counsel is a term that came into American life with the twentieth century but it was little used until the World War period. To most persons it is still no more than a dignified way of saying press agent; perhaps of indicating a very astute press agent skilled in the arts of deodorizing a figure in public life in the manner used by Ivy Lee to bring John D. Rockefeller, Senior, into the good graces of the American public.

These two officials of the John Price Jones Corporation, from a long experience in fund raising and other aspects of the work of a public-relations counselor, show conclusively that publicity and ballyhoo are not the forte of a counselor. Rather he is a business statesman who enters his company's program at the policy-making stage and helps shape productions, labor, sales, and advertising practices in keeping with the demands of the public. His true function is to make unnecessary expensive publicity campaigns to cover up organic defects in corporate structure, to perpetuate unenlightened labor policies, or otherwise to attempt to fool the public. Mr. Jones and Mr. Church make it clear that in a democracy maintaining satisfactory public relations is as much a matter of keeping the individual private business responsive to public opinion as it is keeping the public favorably disposed toward a given college, corporation, or association.

The book is a straightforward exposition of a socially responsible philosophy of public relations. It is a manual that should be in the hands of all persons engaged in the field.

